

## Developing a questionnaire to determine evaluation of self-management in diabetes:

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## **Additional file 1**

### **Appendix 1      Search Strategy**

#### **1. Filters**

- SIGN Systematic Reviews filter for Medline, Embase, Cinahl: <http://www.sign.ac.uk/methodology/filters.html#systematic>
- Health Evidence Bulletins Wales for PyscINFO: <http://hebw.cf.ac.uk/methodology/appendix2.htm> (scroll down to SEARCH FILTER FOR PSYCHLIT/CLIN PSYCH/PSYCHINFO at bottom of page; steps 1-17 is the reviews filter)

#### **2. Strategies**

##### **Medline strategy (searched 02/05/2014)**

- 1 \*Diabetes Mellitus, Type 2/ or \*Diabetes Mellitus, Type 1/ (108942)
- 2 diabet\*.ti. (236220)
- 3 1 or 2 (254563)
- 4 \*Self Care/ (12169)
- 5 (self manag\* or self-manag\*).ti. (3103)
- 6 (self care or self-care).ti. (2821)
- 7 4 or 5 or 6 (13716)
- 8 3 and 7 (2387)
- 9 Meta-Analysis/ (47464)
- 10 meta analy\$.tw. (62349)
- 11 metaanaly\$.tw. (1306)
- 12 meta analysis.pt. (47464)
- 13 (systematic adj (review\$1 or overview\$1)).tw. (53241)
- 14 exp Review Literature/ (1871786)
- 15 or/9-14 (1926042)
- 16 cochrane.ab. (30264)
- 17 embase.ab. (28910)
- 18 (psychlit or psyclit).ab. (891)
- 19 (psychinfo or psycinfo).ab. (12120)
- 20 (cinahl or cinhal).ab. (10160)
- 21 science citation index.ab. (1992)

- 22 bids.ab. (365)
- 23 cancerlit.ab. (581)
- 24 or/16-23 (51967)
- 25 reference list\$.ab. (9783)
- 26 bibliograph\$.ab. (11632)
- 27 hand-search\$.ab. (3956)
- 28 relevant journals.ab. (725)
- 29 manual search\$.ab. (2349)
- 30 or/25-29 (25437)
- 31 selection criteria.ab. (19766)
- 32 data extraction.ab. (9808)
- 33 31 or 32 (27997)
- 34 review.pt. (1867886)
- 35 33 and 34 (18425)
- 36 comment.pt. (581335)
- 37 letter.pt. (837925)
- 38 editorial.pt. (353561)
- 39 animal/ (5290661)
- 40 human/ (13387877)
- 41 39 not (39 and 40) (3837921)
- 42 or/36-38,41 (5113819)
- 43 15 or 24 or 30 or 35 (1939626)
- 44 43 not 42 (1778142)
- 45 8 and 44 (235)
- 46 limit 45 to (english language and yr="2008 -Current") (110)

#### **Embase strategy (searched 02/05/2014)**

- 1 \*diabetes mellitus/ (172194)
- 2 diabet\*.ti. (302408)
- 3 1 or 2 (344299)
- 4 \*self care/ (10442)
- 5 (self manag\* or self-manag\*).ti. (3921)
- 6 (self care or self-care).ti. (3315)
- 7 4 or 5 or 6 (12543)

8 3 and 7 (2351)  
9 exp Meta Analysis/ (77997)  
10 ((meta adj analy\$) or metaanalys\$).tw. (79546)  
11 (systematic adj (review\$1 or overview\$1)).tw. (63854)  
12 or/9-11 (150488)  
13 cancerlit.ab. (640)  
14 cochrane.ab. (35305)  
15 embase.ab. (33310)  
16 (psychlit or psyclit).ab. (941)  
17 (psychinfo or psycinfo).ab. (8497)  
18 (cinahl or cinhal).ab. (10904)  
19 science citation index.ab. (2100)  
20 bids.ab. (448)  
21 or/13-20 (55721)  
22 reference lists.ab. (9554)  
23 bibliograph\$.ab. (14705)  
24 hand-search\$.ab. (4508)  
25 manual search\$.ab. (2711)  
26 relevant journals.ab. (811)  
27 or/22-26 (29094)  
28 data extraction.ab. (11663)  
29 selection criteria.ab. (19185)  
30 28 or 29 (29705)  
31 review.pt. (1942963)  
32 30 and 31 (15843)  
33 letter.pt. (841043)  
34 editorial.pt. (446718)  
35 animal/ (1563694)  
36 human/ (14564825)  
37 35 not (35 and 36) (1186385)  
38 or/33-34,37 (2460532)  
39 12 or 21 or 27 or 32 (185010)  
40 39 not 38 (178648)  
41 8 and 40 (80)

42 limit 41 to (english language and yr="2008 -Current") (49)

**CINAHL strategy (searched 02/05/2014)**

S23	S20 and S21 and S22	<b>Limiters</b> - Published Date: 20080101-20121231 <b>Search modes</b> - Boolean/Phrase
S22	LA English	<b>Limiters</b> - Published Date: 20080101-20121231 <b>Search modes</b> - Boolean/Phrase
S21	DT 20080101-20140501	<b>Limiters</b> - Published Date: 20080101-20121231 <b>Search modes</b> - Boolean/Phrase
S20	S8 and S19	<b>Search modes</b> - Boolean/Phrase
S19	S15 or S16 or S17 or S18	<b>Search modes</b> - Boolean/Phrase
S18	(MH "Animals")	<b>Search modes</b> - Boolean/Phrase
S17	PT Editorial	<b>Search modes</b> - Boolean/Phrase
S16	PT Letter	<b>Search modes</b> - Boolean/Phrase
S15	PT Commentary	<b>Search modes</b> - Boolean/Phrase
S14	S9 or S10 or S11 or S12 or S13	<b>Search modes</b> - Boolean/Phrase
S13	TI ( (systematic N1 (review or overview)) ) OR AB ( (systematic N1 (review or overview)) )	<b>Search modes</b> - Boolean/Phrase
S12	(MH "Literature Review+")	<b>Search modes</b> - Boolean/Phrase
S11	TI Metaanaly* OR AB Metaanaly*	<b>Search modes</b> - Boolean/Phrase
S10	TI Meta analys* OR AB Meta analys*	<b>Search modes</b> - Boolean/Phrase
S9	(MH "Meta Analysis")	<b>Search modes</b> - Boolean/Phrase
S8	S3 and S7	<b>Search modes</b> - Boolean/Phrase
S7	S4 or S5 or S6	<b>Search modes</b> - Boolean/Phrase
S6	TI self care OR TI self-care	<b>Search modes</b> - Boolean/Phrase
S5	TI self manag* OR TI or self-manag*	<b>Search modes</b> - Boolean/Phrase
S4	(MM "Self Care")	<b>Search modes</b> - Boolean/Phrase
S3	S1 OR S2	<b>Search modes</b> - Boolean/Phrase
S2	TI diabet*	<b>Search modes</b> - Boolean/Phrase
S1	(MM "Diabetes Mellitus, Type 2") OR	<b>Search modes</b> - Boolean/Phrase

	(MM "Diabetes Mellitus, Type 1")	
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### Cochrane strategy (searched 02/05/2014)

- #1 MeSH descriptor: [Diabetes Mellitus, Type 1] this term only
- #2 MeSH descriptor: [Diabetes Mellitus, Type 2] this term only
- #3 diabet\*:ti
- #4 (or #1-#3)
- #5 MeSH descriptor: [Self Care] this term only
- #6 (self manag\* or self-manag\*):ti
- #7 (self care or self-care):ti
- #8 (or #5-#7)
- #9 #4 and #8 Publication Date from 2008 to 2014, in Other Reviews and Technology Assessments

### Web of Science Strategy (searched 06/05/2014)

- # 7 **34** #1 AND #4  
**Refined by: DOCUMENT TYPES:** ( REVIEW )  
**AND LANGUAGES:** ( ENGLISH )  
*Indexes=SCI-EXPANDED, SSCI Timespan=2008-2014*
- # 6 **35** #1 AND #4  
**Refined by: DOCUMENT TYPES:** ( REVIEW )  
*Indexes=SCI-EXPANDED, SSCI Timespan=2008-2014*
- # 5 **881** #1 AND #4  
*Indexes=SCI-EXPANDED, SSCI Timespan=2008-2014*
- # 4 **4,577** #2 OR #3  
*Indexes=SCI-EXPANDED, SSCI Timespan=2008-2014*
- # 3 **1,994** TI=(self care OR self-care)  
*Indexes=SCI-EXPANDED, SSCI Timespan=2008-2014*
- # 2 **2,854** TI=(self manag\* OR self-manag\*)  
*Indexes=SCI-EXPANDED, SSCI Timespan=2008-2014*
- # 1 **89,943** TI=(diabet\*)  
*Indexes=SCI-EXPANDED, SSCI Timespan=2008-2014*

### PsychINFO strategy (searched 06/05/2014)

- 1 \*Diabetes/ or \*Diabetes Mellitus/ (9403)
- 2 diabet\*.ti. (8767)

- 3 1 or 2 (10099)
- 4 (self manag\* or self-manag\*).ti. (2045)
- 5 (self care or self-care).ti. (1258)
- 6 4 or 5 (3293)
- 7 3 and 6 (612)
- 8 meta analysis.sh. (3381)
- 9 meta-anal:.tw. (18437)
- 10 metaanal:.tw. (384)
- 11 meta analysis.id. (3538)
- 12 (systematic: and (review: or overview)).tw. (22885)
- 13 (critical: and apprais:).tw. (2796)
- 14 (critical: and review:).tw. (30720)
- 15 8 or 9 or 10 or 11 or 12 or 13 or 14 (68447)
- 16 literature review.sh. (21921)
- 17 literature review.id. (19247)
- 18 16 or 17 (22481)
- 19 15 or 18 (88347)
- 20 case report.sh. (22453)
- 21 19 not 20 (88199)
- 22 7 and 21 (39)
- 23 limit 22 to human (39)
- 24 limit 23 to (english language and yr="2008 -Current") (22)

## Appendix 2 List of potential themes to be discussed with patients with diabetes

Lack of education	Lack of needed skills
Telehealth	Adherence
Self-care behaviours	Taking medication
Monitoring	Diet
Exercise	Reinforcement
Healthy eating	Being active
Problem solving	Reducing risks
Healthy coping	Getting feedback on performance
Information on consequences of behaviour	Barrier identification/problem solving
Focussing on past success	Agree behavioural contract
Fear arousal (hypos)	Depression
Distress	Psychological well-being
Self-efficacy	Stress
Communication	Action planning
Rewards	Prompts/cues
Emotional control	Regret
Individual face-to-face	Group face-to-face
Phone based	DVD based
Internet based	Video conferencing
Number of sessions	IT/web-based/phones
Satisfaction	Knowledge
Empowerment	Health literacy
Memory	Rationale for SM
Information overload	Health beliefs (HBM)
Social support	Financial support
Education/advice	Appraisal – feedback
Emotional support	Self-efficacy (self-belief)
Coping	Managing stress
Denial	Planning
Loss of control	Fatigue
Loss of interest	Reduced decision-making ability
Alcohol consumption	Family support and partner support
Location (urban vs. rural)	Foot care
Requiring insulin – failure	Fear about dose adjustment
Daily SM compromising adherence	Self-confidence
Interpreting food labels	Family support
Marital satisfaction/stress	Family traditions and cultural issues (food)
Individual acceptability	Learning experience
Physical factors	Personal factors
Access factors	Care factors



## **Appendix 3     Topic Guide for interviews**

### **Introduction**

- Name and aim of study
- Confidentiality
- Recording

### **Themes**

- Task-related
  - Monitoring and burden – individually and separate
  - Information overload
  - Satisfaction
  - Reinforcement of behaviour
  - Getting feedback on performance/satisfaction
  - Self-efficacy
  - Problem solving
- Physical
  - Exercise
  - Healthy eating
  - Being active
- Emotional
  - Stress
  - Distress
  - Denial
  - Acceptance
  - Regret/guilt
  - Confidence
  - Coping
  - Control
  - Empowerment – flip side – reduced decision-making ability
  - Requiring insulin – failure
  - Blame – themselves/others/access to services
  - Self-image
- Social
  - Support
  - Relationship stress
  - Peer pressure
  - Understanding of others – friends/family/colleagues